7.0 ANALYSIS OF LONG-TERM EFFECTS

7.1 Cumulative Impacts

Sections 15130 and 15065(c) of the *CEQA Guidelines* require the discussion of cumulative impacts when they are significant. The EIR is required to identify and discuss cumulative impacts that may result from the proposed project when considered with other closely related projects and reasonably foreseeable future projects.

The *CEQA Guidelines* define cumulative effects as "two or more individual effects that, when considered together are considerable, or which compound or increase other environmental impacts." The Guidelines further state that the individual effects can be the various changes related to a single project or the change involved in a number of other closely related past, present, and reasonably foreseeable future projects (*CEQA Guidelines* Section 15355). The Guidelines allow the use of two alternative methods to determine the scope of projects for the cumulative impact analysis:

List Method – A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the lead agency.

General Plan Projection Method – A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact (*CEQA Guidelines* Section 15130).

For purposes of this EIR, the List Method has been used; refer to Table 7-1. Existing and reasonably anticipated projects have been identified and are discussed in greater detail in terms of their potential to contribute to significant cumulative impacts, as part of the following subject-based analysis.

7.1.1 Specific Cumulative Projects

The area surrounding the Ponto site is largely built-out, limiting the number of proposed projects that would contribute to cumulative project impacts, due to proximity to the project development area. Five individual projects were identified and considered for the cumulative impact analysis and are in varied stages of planning and development. Information regarding these projects was collected with assistance from the City and from active applications filed with the City Planning Department. Specific projects encompassed within this cumulative analysis are shown in Figure 7-1 and listed in Table 7-1.

Hotel Project - City of Encinitas (99-001; 04-268; 93-172)

The hotel project involves the consolidation of four existing lots into one parcel of approximately 4.3 acres. The project site is located directly to the south of the Ponto Beachfront Village site, across Batiquitos Lagoon, in the City of Encinitas. The project requires a major use permit (MUP) to allow for development of a 130-room hotel with a 200-seat restaurant and lounge area, meeting rooms, and an administrative/service area for a total floor area of approximately 122,540 square feet. A total of 229 parking spaces are also

proposed. An EIR was approved for the project by the Encinitas City Council on January 22, 1992.

Poinsettia Single-family Residential (CT –5-10)

This project proposes the subdivision of approximately 5.0 acres into 29 single-family residential lots, two open space lots, and one driveway lot. The project site is located to the northeast of the Ponto Beachfront Village site, east of Interstate 5 along Poinsettia Lane. A Mitigated Negative Declaration (MND), dated May 2, 2006, and a Notice of Declaration (NoD), dated May 19, 2006, have been issued for the project.

Calvary Chapel (CUP 04-05)

The Calvary Chapel project is located on an approximately 27-acre site, located to the northeast of the Ponto Beachfront Village project site, across Interstate 5 at the northeast corner of Aviara Parkway and Poinsettia Lane. The project proposes a 13-acre church campus, supporting a 49,000 sq. ft. multi-purpose building and family center (maximum capacity 1,800 persons). Uses proposed as part of the church campus include a 19,000 sq. ft. two-story preschool (150 students), 4,000 sq. ft. chapel building, 7,000 sq. ft. gymnasium, 3,000 sq. ft. youth building, and 6,000 sq. ft. adult education building. Approximately 1,050 parking spaces will be provided to support the facilities. A MND, dated September 20, 2005, and a NOD, dated January 11, 2005, have been issued for the project.

Bressi Ranch (CT 02-14; CT 02-15; CT 03-03; CT 02-19)

The Bressi Ranch project site is approximately 585.1 acres in size and is located to the northeast of the project site, east of Interstate 5 and along Palomar Airport Road. The project site is divided into a northern and a southern portion and will ultimately include development of 15 planning areas and six open space areas. The northern area (approximately 150.3 acres) will involve development of five industrial lots; the southern area (approximately 434.8 acres) will include development of seven residential lots, one industrial lot, one mixed-use lot, one community facility lot, and six open space lots. A Master Plan EIR was approved for the project on July 23, 2002. Portions of the project are currently either built or under construction, while other areas remain unbuilt.

La Costa Town Square Project (CT 01-09)

The La Costa Town Square project site is approximately 81 acres in size, located to the southeast of the Ponto Beachfront Village project site, near the northeast corner of La Costa Drive and Rancho Santa Fe; refer to Figure 7-1. The project proposes a mixed-use retail/commercial/office/residential development. The project will result in the development of 131 residential units, 80,000 sq. ft. of industrial space, and 380,000 sq. ft. of commercial space. Approximately 5.7 acres will be protected as on-site open space. An EIR is currently pending for the project.

7.1.2 Air Quality

7.1.2.1 Cumulative Construction Emissions

The San Diego Regional Air Quality Strategies (RAQS) establish an “emissions budget” for the San Diego Air Basin. This budget takes into account existing conditions, planned growth

based on the general plans of cities within the San Diego Association of Governments (SANDAG) region, and air quality control measures implemented by the San Diego Air Pollution Control District (SDAPCD).

With respect to the project's construction-period air quality emissions and cumulative Basin-wide conditions, the SDAPCD has developed strategies to reduce criteria pollutant emissions outlined in the RAQS pursuant to FCAA mandates. As such, the proposed project would comply with all feasible mitigation measures. In addition, the proposed project would comply with adopted RAQS emissions control measures. Per SDAPCD rules and mandates as well as the CEQA requirement that significant impacts be mitigated to the maximum extent feasible, these same requirements (i.e., fugitive dust compliance, the implementation of all feasible mitigation measures, and compliance with adopted RAQS emissions control measures) would also be imposed on construction projects Basin-wide, which would include each of the related projects mentioned above.

Although compliance with SDAPCD rules and regulations would reduce construction-related impacts, the project-related construction emissions have been concluded to be significant and unavoidable. Thus, it can be reasonably inferred that the project-related construction activities, in combination with those from other projects in the area would deteriorate the local air quality and lead to cumulative construction-related impact. Therefore, even with the implementation of Mitigation Measures AQ-1 through AQ-5 given in Section 5.1, a significant and unavoidable cumulative construction air quality impact would result.

7.1.2.2 Cumulative Long-Term Impacts

The SDAPCD classifies cumulative impacts as direct and indirect project emissions. If a project-related air quality impact is individually less than significant, the impacts of reasonably anticipated future activities, probable future projects, and past projects are included based on similar air quality impacts, transport considerations and geographic location. Currently the SDAPCD's approach towards assessing cumulative impacts is based on the fact that the SDAPCD Regional Air Quality Strategy forecasts attainment of ambient air quality standards in accordance with the requirements of the CCAA, which takes into account the SANDAG forecasted future regional growth. Although it has been shown that the project would be consistent with RAQS and the RCP, the project would still exceed the SDAPCD regional thresholds of significance for ROG and PM_{10}, which are regional transport pollutants and ozone precursors. As a result, the proposed project in combination with other reasonably foreseeable projects could lead to periodic exceedances of the Ambient Air Quality Standards. Therefore, the proposed project would result in a significant and unavoidable cumulatively significant impact.

7.1.3 Biological Resources

As shown on Table 5.2-5, the implementation of the proposed project would significantly impact approximately 3.14 acres of three sensitive vegetation communities (southern willow scrub, southern coastal bluff scrub [including disturbed], and Diegan coastal sage scrub [including disturbed]). In addition, the proposed project would impact 22.7 acres of vegetation communities that are not sensitive but require mitigation (eucalyptus woodland and disturbed habitat).

In addition to significant biological resource impacts associated with the proposed project, the biological resources analysis for the Ponto Vision Plan analyzed potential cumulative impacts resulting from the five development projects identified within the cumulative study area (City of Encinitas Hotel Project, Poinsettia Single-family Residential, Calvary Chapel Project, Bressi Ranch, and La Costa Town Square Project). One project, Poinsettia Single-family Residential, was determined not to result in significant impacts to biological resources, given that the site was previously impacted in conjunction with the surrounding residential development. The remaining four cumulative projects would result in significant, but mitigable, impacts to biological resources.

Two of the five cumulative projects would result in impacts to 416.0 acres of vegetation communities requiring mitigation, including 0.08 acre of southern willow scrub, 30.9 acres of Diegan coastal sage scrub (including disturbed), and 385.0 acres of disturbed habitat; refer to Table 7-2. These impacts would be significant, but mitigable.

The proposed project would significantly impact 0.04 acre of southern willow scrub, which represents 33.3 percent of the currently assessed cumulative impacts. The proposed project would impact 0.1 acre of southern coastal bluff scrub (including disturbed) and 0.3 acre of eucalyptus woodland, which represents 100 percent of the currently assessed cumulative impacts for both habitats. The proposed project would significantly impact 1.2 acres of Diegan coastal sage scrub (including disturbed), which represents 3.7 percent of the currently assessed cumulative impacts. The proposed project would significantly impact 21.1 acres of disturbed habitat, which represents 5.2 percent of the currently assessed cumulative impacts. Because the proposed project would fully mitigate for its impacts to these habitats, cumulative impacts would not be significant.

All projects are required to mitigate for impacts to sensitive vegetation communities pursuant to the Natural Communities Conservation Planning program (NCCP). All impacts would be fully mitigated. As such, the proposed project together with the five cumulative projects would not have a significant impact on vegetation communities; refer to Table 7-2.

Of the five cumulative projects, two projects would result in significant or potentially significant but mitigable impacts to biological resources. The proposed project and other projects being proposed or constructed in the area would be required to comply with regional planning efforts (i.e., NCCP) intended to address cumulative impacts to sensitive plant and animal species, as well as the habitats in which they occur. The proposed project would provide mitigation for impacts to sensitive habitats consistent with these plans. As a result, the proposed project would result in less than significant cumulative impacts to sensitive biological resources.

Therefore, the Vision Plan is not anticipated to contribute to a cumulative impact related to biological resources.

7.1.4 Cultural Resources

Land within the immediate area surrounding the project site is generally built-out. With the development of the five identified cumulative projects, the potential for an increase in impacts on archaeological sites in the City would occur, as grading and construction activities would result in disturbance to the lands.

According to CEQA, the importance of cultural resources comes from the research value and the information they contain. Therefore, the issue that must be explored in a cumulative analysis is the cumulative loss of that information. For sites considered less than significant, the information is preserved through recordation and test excavations. Significant sites that are placed within open space easements would avoid impacts to cultural resources while preserving the data. Significant sites that are not placed within open space easements would preserve the information through recordation, test excavations, and data recovery programs that would be presented in reports and filed with the City of Carlsbad and the South Coastal Information Center (SCIC). The artifact collections from any potentially significant site would also be curated at the San Diego Archaeological Center and would also be available to other archaeologists for further study.

The cultural resources analysis for the Ponto project indicated that, as significant cultural sites have been identified on the project site, additional significant cultural resources may be located within the City of Carlsbad. Disturbance of and construction on the currently vacant portions of the site have the potential to affect cultural resources in the site vicinity, potentially leading to a significant cumulative loss of such resources in the area. As development of the five projects identified for the cumulative analysis occurs in the future, landowners would be required to complete a site review and technical studies, as appropriate, to identify potentially significant cultural resources sites and provide proper mitigation to reduce impacts to less than significant. The proposed project's potential impacts to cultural resources would be mitigated to below a level of significance through establishment of a grading monitoring program, and all sites identified within the project footprint would be recorded. To reduce potential impacts on cultural resources located on the cumulative projects sites, mitigation measures, such as open space easements, and/or monitoring during grading activities, would be required to reduce impacts to less than significant. Therefore, because the impacts resulting from the proposed project and those projects within the cumulative impact study area would be mitigated to less than significant, the proposed project would not cumulatively contribute to a significant impact on cultural resources.

7.1.5 Hazardous Materials and Hazards

Continued future development, both on vacant and redeveloped lands, within the City of Carlsbad has the potential to result in the discovery of or human exposure to hazards or hazardous materials. With consideration of the five project sites considered for the cumulative analysis, preparation of Phase I Environmental Site Assessments would be required, as applicable, to identify hazardous conditions on the properties and to determine the potential for significant human health risk or hazardous conditions (i.e., contaminated soils or risk of wildfire). Additional assessment in the form of a Phase II analysis may also be required, if materials or conditions on-site are determined to pose substantial hazardous risk. Mitigation in the form of site remediation would be required as necessary to mitigate the potential impact as the result of each development project. In addition, a change in ownership of any of the ownerships would require identification of hazardous materials and conformance with the applicable federal, state and local regulations for the clean-up of such materials or conditions. As a result, implementation of the Ponto Vision Plan, with consideration for the other cumulative projects, is not anticipated to contribute to a significant cumulative impact related to hazards or hazardous materials.

7.1.6 Noise

Of the other five related projects that have been identified within the project study area, the Applicant has no control over the timing or sequencing of related projects, and as such, any quantitative analysis to ascertain the daily construction emissions that assumes multiple, concurrent construction would be speculative. Construction-related noise for the proposed project and each related project would be localized. In addition, it is likely that each of the related projects would have to comply with the local noise ordinance, as well as mitigation measures that may be prescribed pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible. Thus, as construction noise is localized in nature and drops off rapidly from the source, a significant cumulative construction-related noise impact would not result. Mitigation measures given Section 5.5 would ensure that cumulative noise impacts from project construction do not result.

With regard to stationary sources, the major stationary sources of noise that would be introduced in the Vision Plan Area by related projects would include rooftop equipment, loading docks, and residential activities. Since these projects would be required to adhere to City of Carlsbad noise standards, all the stationary sources would be required to provide shielding or other noise abatement measures so as not to cause a substantial increase in ambient noise levels. As such, it is not anticipated that a significant cumulative increase in permanent ambient noise levels would occur and the impact would be less than significant. Consequently, the proposed Vision Plan's contribution to cumulative stationary noise impacts is not considered to be cumulatively considerable.

7.1.7 Traffic and Circulation

The cumulative impact analysis forecasts the traffic impacts in an area resulting from the proposed project when considered with other related past, present, and reasonably foreseeable probable future projects.

The North County Subarea Model, which is based on the SANDAG Series 10 model, was used for the Near Term 2010 Analysis to identify the project's potential for significant cumulative impacts. Average Daily Traffic volumes produced by the traffic model were post-processed to forecast peak hour intersection turning movement volumes and peak hour roadway segment volumes. In the vicinity of the new roadways, turns reports produced by the traffic model were reviewed to identify potential changes in traffic patterns with the opening and/or extension of new roadways. The Subarea model assumes the full buildout of the roadway network identified in the City's Circulation Element by the year 2030, which assumes the following major transportation improvements to be in place in the City of Carlsbad in the near term (prior to 2010):

- Extension of El Fuerte from Palomar Airport Road to Faraday Avenue (2007);
- Construction of Faraday Avenue from El Camino to Melrose Drive (2007); and,
- Completion of Poinsettia Lane (2010).

Under the 2010 analysis, two scenarios were analyzed. The first scenario analyzed 2010 traffic without the land uses proposed by the Vision Plan. For this scenario, it was assumed that the Ponto Area would be developed with uses as defined by the existing General Plan land use designations for the site. The Ponto Area would generate between 12,708 and

15,408 daily trips if developed under the existing General Plan land use designations. Based on a trip distribution and assignment model, peak hour traffic volumes and average daily trip volumes were calculated for the study area intersections and street segments for this scenario (2010 Without Vision Plan). The results are provided on Figures 7-2, 7-4, and 7-5.

The second scenario analyzed 2010 traffic with the land uses proposed by the Vision Plan. The land uses proposed by the Vision Plan would generate approximately 15,161 trips. Based on a trip distribution and assignment model, peak hour traffic volumes and average daily trip volumes were calculated for the study area intersections and street segments for this scenario (2010 with Vision Plan). The results are provided on Figures 7-3, 7-6 and 7-7.

For both scenarios, the LOS for the study area intersections was analyzed using the delay-based 2000 Highway Capacity Manual (HCM) Operations methodology. This methodology is described in detail in the Traffic Analysis provided in Appendix G. The results are discussed below.

Intersection Operations

Table 7-3 summarizes the results of the Near-Term (2010) analysis for both scenarios (Without Vision Plan and With Vision Plan). As illustrated on Figures 7-4 through 7-7, most intersections would operate at an acceptable (LOS A or B) or marginal LOS (LOS C or D) in the year 2010 under both scenarios (Without the Vision Plan and With the Vision Plan). The following four intersections are forecast to operate at deficient ("failing") LOS (LOS E or F) without or with the Vision Plan:

- Palomar Airport Road / El Camino Real;
- Palomar Airport Road / El Fuerte Street;
- La Costa Avenue / Vulcan Avenue, and,
- La Costa Avenue / El Camino Real.

To determine if the Vision Plan's contribution to the above impacts are significant, the following threshold applies:

- When an intersection or roadway segment is operating at deficient service levels, the addition of trips generated by the proposed land use in the Vision Plan results in an increase in delay of more than 2.0 seconds when compared to the Without Vision Plan condition.

Impacts T-1 and T-2 The traffic generated by implementation of the Vision Plan would not result in a change in delay of more than 2.0 seconds at the above intersections, with the exception of the intersection at La Costa Avenue/Vulcan Avenue, when compared to the 2010 Without the Vision Plan analysis; refer to Table 7-3. Therefore, this would be considered a significant impact and mitigation would be required.

Street Segments

The peak hour roadway segment analysis determined the LOS of the street segments within the study area (for the Without the Vision Plan and With the Vision Plan scenarios) by calculating volume-to-capacity ratio (V/C) of the street segments. The V/C of a street segment is calculated by dividing the peak hour traffic volume (or average daily traffic

volume) of the street segment by the peak hour capacity (or daily capacity) of the street segment. The following V/C ratios determine the LOS of the street segment:

- V/C of 0.00 to 0.60: LOS A
- V/C of 0.61 to 0.70: LOS B
- V/C of 0.71 to 0.80: LOS C
- V/C of 0.81 to 0.90: LOS D
- V/C of 0.91 to 1.00: LOS E
- V/C over 1.00: LOS F

Peak Hour Street Segments

The results of the 2010 Peak Hour Segment Analysis are provided in Table 7-4. Based on the road segment capacities identified in the City of Carlsbad's Circulation Element, all future roadway segments are forecast to operate at an acceptable LOS (LOS D or better) during the peak hours under both 2010 scenarios (Without the Vision Plan and With the Vision Plan). Therefore, peak hour impacts to the street segments would be considered less than significant.

Mitigation Measures

Mitigation Measures T-1 through T-2 (refer to Section 5.6.4) would mitigate the Vision Plan's contribution to cumulative intersection impacts that would occur under the year 2010 analysis.

7.1.8 Grading and Aesthetics

Over time, development of the project site would ultimately change the visual character of the existing conditions, as the property stands largely undeveloped. Short-term impacts would result from grading and construction on the site, and would convert the natural setting into a built environment, similar to the developed lands adjacent to the property. However, the Vision Plan provides design guidelines to reduce potential visual impacts and to ensure an adhesive visual character that would respect the site's location along the scenic corridor. In addition, development would occur consistent with the City's Scenic Corridor Guidelines, zoning and General Plan designations, coastal development restrictions, and other applicable development standards, policies and regulations to reduce potential visual impacts to less than significant. Project-specific visual impacts were not identified for the development that would result with implementation of the Vision Plan. In addition, all cumulative projects would require City review for determination of conformance with applicable policies and regulations, pertaining to visual resources, including consistency with the General Plan. Therefore, future development associated with the Vision Plan is not anticipated to contribute to a cumulative visual impact related to grading or aesthetics.

7.1.9 Agricultural Resources

Several large-scale agricultural operations are active within the City of Carlsbad. The Flower Fields and the strawberry fields also represent agricultural activities, with other smaller-scale

operations within the city limits on individual properties, providing produce and other agricultural products for commercial sale.

Development within both the City of Carlsbad and the County of San Diego will continue to result in the conversion of agricultural lands to urban uses in the future. Although agricultural activities occurred on the project site, the development area is no longer actively used for such operations. Therefore, development of the project site would not remove such activities from the County's agricultural operations or resources. In addition, the project would not convert land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as identified by the California Department of Conservation, as no such lands have been identified on-site. Although agricultural lands may be converted with the cumulative projects considered, the conversion of such lands to an urban use reflects the general trend within the City and the region, largely due to economic and social influences. The City's General Plan and General Plan EIR recognize this condition and account for such impacts with the intent that agricultural lands be used for such purposes as desired until planning for alternative uses is applicable. Therefore, project impacts are not considered to be cumulatively considerable by impeding existing or future agricultural uses within the City of Carlsbad or the surrounding region.

7.1.10 Geology and Soils

Cumulative development would result in the potential for exposure of a greater number of people to geologic conditions where the risk to human health may be increased (i.e., earthquakes). Due to location and distance from the project site, development of the projects considered in the cumulative analysis in combination with development of the project site would not create a cumulatively considerable geologic hazard, such as an increased risk of mudslides or unstable slopes. Hazardous geologic conditions would be addressed through project-specific review, both on the project site and on the cumulative projects sites, thereby reducing potential impacts to less than significant through applicable engineering and grading applications. Implementation of the Vision Plan is therefore not considered to contribute to a significant cumulative impact relative to geology or soils.

7.1.11 Hydrology/Water Quality

The Ponto development area lies within the San Marcos hydrologic area of the Carlsbad Hydrographic Unit. Receiving waters for the project site are the Batiquitos Lagoon and the Pacific Ocean.

The design of individual projects within the project development area would not significantly alter drainage patterns downstream of the site within the watershed. While runoff patterns would be altered by the construction of curbs, streets, and other improvements, these changes would occur within the project area limits. As a result, existing drainage facilities within the watershed or another watershed would not be adversely affected by a significant change in drainage patterns. Therefore, the proposed project is not considered to result in a significant cumulative impact to hydrologic conditions.

In addition, the proposed off-site improvements within Carlsbad Boulevard would allow flows to continue downstream as under existing conditions. The proposed road relocation would not substantially increase peak discharges, substantially increase the runoff coefficient, or decrease the time of concentration. Thus, hydrologic conditions would not be

adversely impacted by the road widening improvements required with the proposed project. Therefore, the project is not anticipated to contribute to a cumulative considerable impact to hydrology as the result of off-site roadway improvements.

Implementation of the proposed project, in addition to cumulative projects in the surrounding area, would result in an increased amount of soil disturbance and increased impervious surfaces within the cumulative study area. This could potentially result in increased erosion, runoff, flooding hazards, and pollutant concentrations within the watershed. BMPs for the proposed project would reduce potentially significant project level drainage/hydrology impacts to less than significant. The change in land use and associated increase in the runoff from impervious surfaces, along with the addition of drainage facilities, is not anticipated to create a cumulatively considerable impact to existing hydrologic conditions.

All approved or future developments considered in the cumulative analysis, including the proposed project, would also be required to implement BMPs to reduce potential water quality impacts to less than significant, consistent with the City's Jurisdictional Urban Runoff Management Plan (JURMP) and Standard Urban Storm Water Mitigation Plan (SUSMP) requirements. The combination of proposed construction and post-construction BMPs would reduce, to the maximum extent practicable, the expected pollutants and would not adversely impact the beneficial uses or water quality of the receiving waters within the watershed. As a result, no cumulatively considerable water quality impacts are anticipated for the projects considered, in combination with development of the proposed project.

7.1.12 Land Use

The area surrounding the project site is largely built out, with little vacant land remaining for potential new development. Land uses proposed for the project development area would be consistent with that intended by the General Plan. Future development within the City would also be required to demonstrate consistency with the General Plan, Growth Management Plans, and other regulations intended to guide growth within the City in the future. Consistency with these plans and regulations would ensure that such projects did not contribute to a cumulative impact related to land use. As such, development of the project area is not considered to contribute to a significant cumulative land use impact.

7.1.13 Population and Housing

As required, the proposed project would be consistent with the goals and policies of the City's Growth Management Plan and LFMPs (for applicable Zones 9 and 22). Similarly, all existing and future development is required to demonstrate consistency with these Plans to guide future growth and the provision of public facilities and services within the City. Conformance with these Plans and continued review and updates by the City to ensure that development occurs as planned would reduce impacts to population and housing caused by uncontrolled growth or insufficient facilities or services to less than significant. Therefore, implementation of the Vision Plan is not anticipated to contribute to a cumulative impact related to housing or population.

7.1.14 Public Services and Utilities

As with future development within the City of Carlsbad, development of the project site would result in an incremental increase in the demand for public utilities and services.

Although the area surrounding the Ponto development area is largely built out, population within the City will continue to grow in the future, thereby increasing the demand for public services such as police and fire protection, as well as utilities such as water and electrical power; however, all future development within the City would be required to be consistent with the applicable LFMP as part of the City's Growth Management Program. As such, public services and utilities would be adequately provided for within each LFMP zone, and as applicable to the projects considered in the cumulative analysis, thereby reducing potential impacts on such resources. All existing and future development would be required to pay fees as appropriate for such services to provide a financial mechanism for construction or service, thereby ensuring that such services and facilities are adequate at the time of development. As the project development area and the other projects considered in the cumulative analysis would be consistent with the measures of the appropriate LFMPs, cumulative impacts on public services and facilities would be less than significant.

7.1.15 Recreation

Development of the project site would result in an increase in both permanent and transient population in the project area, thereby increasing the demand for provision of recreational services. However, development of the site would occur consistent with the LFMPs prepared for Zones 9 and 22 for the provision of parks. The Vision Plan also envisions an approximate four-acre linear park with picnic tables and benches with views to the ocean for recreational purposes. Other recreational amenities include a wetland interpretive park, nature/arts center, and numerous trails and pathways, in addition to the amenities provided by the hotels and resort services. Improvements for parking and access are also planned to improve recreational opportunities provided by South Carlsbad State Beach. As a result of the land uses proposed, implementation of the Ponto Vision Plan is not anticipated to contribute to a significant cumulative impact on recreational resources.

7.2 Growth Inducing Impacts

As required by State CEQA Guidelines (Section 15126.2(d), consideration of growth-inducing impacts resulting from the project is required as part of the EIR analysis. Growth inducement is defined according to CEQA as, "…ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment."

Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place without the implementation of the proposed project. Typically, the growth inducing potential of a project would be considered significant if it results in growth or population concentration that exceeds those assumptions included in pertinent master plans, land use plans, or projections made by regional planning authorities.

Implementation of the Ponto Beachfront Village Vision Plan would not remove any barriers to growth that would otherwise preclude development if the proposed uses were not to be developed. The project site is located adjacent to established residential neighborhoods. Although the majority of the Ponto site is largely vacant, infrastructure (water, sewer, and electric utilities) currently extend to the site and are available to serve the proposed uses. Therefore, no major extension of infrastructure would be required to serve the Ponto development area, although improvements are proposed. The minor extension of

infrastructure into the project site as necessary to serve areas that are currently vacant would not open up any new lands near the Ponto site for development, as areas adjacent to the Ponto site are already built-out and are served by public sewer, water and other utility systems.

The resulting development proposed by the Ponto Vision Plan would be consistent with growth patterns anticipated by the City of Carlsbad General Plan for the area. The uses proposed would be consistent with the City General Plan and Growth Management Program, and would conform to the goals and policies of the Local Facilities Management Plans (Zones 9 and 22) for infrastructure improvements and public services, such as educational facilities and recreational amenities, and would thereby not represent an increase in the number of dwelling units or population above that anticipated. As stated previously, the Vision Plan would reduce the density and the overall number of proposed units as compared to that allowed under the existing General Plan designations, thereby reducing potential growth assumed for the area in the LFMPs.

Implementation of the Vision Plan would result in the development of the project site with hotels, timeshare units, and residential units, in addition to commercial retail and recreational amenities. As the hotel and timeshare units would support a transient population, rather than a permanent long-term demand for housing, these uses would not be considered to directly result in an increase in dwelling units for people residing in the area. The Vision Plan would generate short-term employment opportunities over time during the construction phase on individual properties, and long-term employment opportunities during the operations phase in the proposed resort and commercial uses; however, this level of development and type of use (visitor/commercial) is not expected to directly or indirectly result in a significant increase in population in the area, nor a significant increase in the demand for housing. Therefore, implementation of the Vision Plan would not result in a direct or indirect growth-inducing impact.

7.3 Significant Irreversible Environmental Changes

As required by CEQA Section 15126.2(c), the consideration for the Ponto Beachfront Vision Plan to result in the potential use of non-renewable resources during both the project construction phase and the long-term occupancy and operational phases. Non-renewable resources may include energy; gravel; sand; lumber or other wood products; water; fossil fuels; metals; and, petrochemical construction materials. Construction activities within the Ponto development area, as well as during the future operation of the proposed uses, would contribute to an incremental consumption of these resources both locally and regionally. In addition, the development of land within the Ponto Vision Plan development area would be consistent with the City's plans for growth and development, as referenced in the adopted policies and goals of the General Plan and the LFMPs. Therefore, the consumption of these resources is not anticipated to result in a significant degradation or destruction of sensitive natural resources.

7.4 Unavoidable Significant Environmental Impacts

The proposed project would not result in an unavoidable long-term significant environmental impact to air quality. As development of the project site would add project traffic to the circulation system, an increase in air quality emissions would occur. As the San Diego Air Basin is in non-attainment for state air quality standards for O_3 and PM_{10}, the project would

contribute emissions to an existing air quality violation. This significant impact would occur over the long-term, as technology is not available to reduce future vehicular operations and resultant air pollutants to a less than significant level.

Refer to the analysis included in Chapter 5.0 of this EIR for discussion of significant impacts resulting from the project.

7.5 Effects Found Not to be Significant

7.5.1 Effects Found Not to be Significant as Part of the EIR Process

Based on the analysis given in Chapter 5.0 of this EIR, the proposed Ponto Beachfront Village Vision Plan would not result in significant impacts for the areas of Grading and Aesthetics; Agricultural Resources; Geology/Soils; Hydrology/Water Quality; Land Use; Population and Housing; Utilities and Public Services; and Recreation.

7.5.2 Effects Found Not to be Significant During the Initial Study

Effects found not to be potentially significant as part of the Initial Study and EIR scoping process include: Energy and Mineral Resources, Population and Housing, and Recreational Facilities, and therefore, were not included in the analysis in Section 5.0. Refer to the Initial Study provided in Appendix A of this EIR for a discussion of potential impacts found not to be significant during the initial EIR scoping process.

7.5.2.1 Energy and Mineral Resources

Future development of the Ponto area would require the consumption of energy during the construction phase, as well as during occupancy and operation of the proposed uses. Energy use for the area would consist of that typical of similar uses and would include electricity, oil, petroleum and other non-renewable resources. All future construction would be required to comply with Title 24 of the California Administrative Code, which establishes energy conservation requirements for new construction. Significant sources of non-renewable energy resources or known mineral resources of value to the City, region or state have not been identified within the City of Carlsbad, and therefore, future development of the project site would not result in the loss or decreased availability of such resources. Therefore, implementation of the Vision Plan is not anticipated to result in significant impacts to energy or mineral resources.

7.5.2.2 Population and Housing

As described in Section 5.11, Land Use and Planning, as part of the City's Growth Management Program (GMP) and consistent with Chapter 21.90 of the City Zoning Ordinance, the City has been divided into 25 subareas, or zones, to guide the provision of facilities at a detailed level and to ensure that services and facilities will be adequately provided for existing and future development. Local Facilities Management Plans (LFMPs) address future growth and the future demand on public services and facilities. Preparation of a LFMP is required for each zone to implement the GMP by phasing development and the provision of public facilities, consistent with the GMP performance standards. The Ponto Vision Plan area is located within Zones 9 and 22 of the City's Local Facilities Management Plans; refer to Figure 5.12-1. Future development proposals within the Ponto development area would be required to demonstrate that proposed facilities are consistent with the

appropriate LFMP or propose amendments to the LFMP to ensure that public facilities and services are adequately provided to serve the development.

The GMP limits the number of residential building permits that can be issued throughout the city to a maximum of approximately 54,600 dwelling units at buildout. The proposed project is within the Southwest Quadrant of the City, which allows for a maximum total of 12,859 dwelling units at buildout. This maximum number of units cannot be changed, unless approved by public vote.

The Zone 9 LFMP, originally adopted in 1989, anticipated the buildout development capacity of the Zone to be 910 dwelling units and approximately 1,092,200 square feet of non-residential use. The 1993 LFMP amendment reflected the adoption of the Poinsettia Shores Master Plan and revised the projected number of residential dwelling units to 1,023, or an additional 113 units as allowed by the City of Carlsbad Density Bonus Ordinance. Projected non-residential uses were reduced to 178,600 square feet and 220 timeshares/hotel units.

The Zone 22 LFMP, originally adopted in 1988, projected residential buildout at 1,472 dwelling units and 970,952 square feet of non-residential development. With the 1997 LFMP amendment, which reflected the adoption of the Poinsettia Shores Master Plan, the number of projected dwelling units was revised to 1,426. Non-residential uses were increased to 1,001,436 square feet.

The adopted City of Carlsbad General Plan designates a mixture of uses for the project development area, which include travel, recreation, commercial, neighborhood commercial, and residential uses under the existing land use designations. With implementation of the Vision Plan, the uses proposed would remain consistent with the type of development envisioned for this area under the current land use designations. As proposed under the Vision Plan, the 50-acre development area would be developed at a reduced density as compared to that which is currently allowed, thereby creating a corresponding reduction to population projections within the southwest quadrant of the City.

Through the GMP, the City actively monitors development activity to assure compliance with the Growth Management Plan and ensure that adequate facilities and services are available for the City's residents as the population continues to grow. Monitoring techniques include subdivision review; monthly development monitoring reports (residential and non-residential building permit activity); traffic monitoring reports; annual reporting on performance measures for growth management and capital projects to City Council; annual evaluation of individual capital improvement projects; an excess dwelling unit bank to control residential development; and, construction updates for public and private projects.

Performance standards for future growth are established in the City's Growth Management Plan and address eleven public facilities, of which eight are provided by the City of Carlsbad and three are provided in part by other agencies. These standards allow the City to control future development and to estimate future demand for public facilities and services, as well as to plan for the construction of such facilities. City approval of proposed development requires that the applicant demonstrate consistency with the performance standards established for the zone.

Implementation of the project would not remove any barriers to growth that would otherwise preclude development if the project were not to be developed. The proposed project would

involve minor construction, extension, or relocation of existing utilities to serve the project site. As surrounding neighborhoods to the north and east are built out and currently receive public water and sewer services, provision of these services to the project site would not provide increased capacity beyond existing conditions that would allow for the construction of a number of residential units that may not be anticipated by the General Plan and zoning designations because of the increased capacity. Therefore, impacts due to population growth due to the provision of utilities for development of the project site would be less than significant.

As stated above, implementation of the Vision Plan would result in a reduction in the number of residential units and resulting population from that anticipated for in the approved LFMPs for Zones 9 and 22. As discussed in Section 5.12, Public Services and Utilities, implementation of the Vision Plan would not adversely impact planned or current levels of service for public facilities such as sewer, water, open space, parks, libraries, or fire or police protection, as the Plan would be consistent with (or lower than) the number of dwelling units planned for the area. As a result, implementation of the Vision Plan would not significantly impact the planned residential unit count, population, or growth patterns intended for the project development area or place an unanticipated demand on public facilities or services.

Therefore, implementation of the Vision Plan is not anticipated to induce substantial population growth of the area, either directly (i.e., by proposing new homes and businesses) or indirectly (i.e., through extension of roads or other infrastructure), as growth and provision of facilities and services would occur consistent with that projected for the area. Development within the proposed Ponto development area would therefore be in conformance with the City General Plan, Zoning Ordinance, Growth Management Plan, LFMPs 9 and 22, and the South Carlsbad Coastal Redevelopment Area Plan, as well as other applicable goals and policies pertaining the future growth and development.

Development of individual properties on the project site with the proposed residential, commercial, and recreational uses would generate short-term employment opportunities during the construction phase and long-term employment opportunities during the operations phase; however, this level of development and type of uses is not expected to directly or indirectly result in a significant increase in population in the area, nor a significant increase in the demand for permanent housing. Therefore, impacts to area population growth would be less than significant.

In addition, the Vision Plan is intended to serve as a guide for redevelopment of the Ponto development area and does not propose site-specific development or a phasing schedule for when development should occur. As development of the area would take place over future years, with applications submitted by individual landowners when development or redevelopment is desired, implementation of the Vision Plan would not result in adverse impacts caused by the displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere, as current landowners would not be forced from their homes or businesses to facilitate the proposed development.

7.5.2.3 Recreational Facilities

Implementation of the Vision Plan would not result in significant impacts to existing recreational uses as a result of the project. Future development would be required to prepare development plans consistent with the Ponto Beachfront Village Vision Plan, which includes

design elements to supplement and enhance opportunities for recreation in the area. Such elements include a variety of trails and pathways, a Beachfront Resort multi-purpose trail, a wetland interpretive trail, pedestrian trails with connection to a regional trail system, and a connection to the Coastal Rail Trail which runs to the east of the Ponto site. Additional parking along and a pedestrian underpass below Carlsbad Boulevard are proposed for improved vehicular and pedestrian access to the South Carlsbad State Beach and Campground. Other recreational elements and community amenities envisioned include construction of a wetland interpretive park, a golf putting course, a community nature/arts center, an approximate four-acre linear park to the west of (realigned) Carlsbad Boulevard, and other plazas, courtyards, and pedestrian spaces for both active and passive recreational opportunities.

In addition, the LFMPs for Zones 9 and 22 state that sufficient existing and projected parkland has been identified through buildout of the Southwest Quadrant. To ensure the continued provision of parkland within the District and conformance with performance standards, landowners within the quadrant would be required to pay Park-in-Lieu fees and Public Facilities Fees for the financing of parks prior to the approval of final maps or issuance of building permits, as no additional dedication of parkland is required. The LFMPs for Zones 9 and 22 require this condition. As the provision of parkland within the District is adequate, implementation of the Ponto Vision Plan would meet the performance standards and impacts would be less than significant.

Therefore, the Vision Plan is not anticipated to increase the use of existing neighborhood or regional parks or other recreational facilities such that a substantial deterioration of a facility would occur. In addition, implementation of the Vision Plan would not include the construction or expansion of recreational facilities that would have an adverse affect on the environment. Therefore, the project would not adversely affect existing recreational opportunities or resources within the City, and impacts would be less than significant.

Table 7-1
Cumulative Projects

Site Number	Reference/Project Number	NAME	Characteristics/Status	Impacts
1	99-001; 04-268; 93-172 (Located south of project site, across Batiquitos Lagoon)	Hotel Project (City of Encinitas)	The project is a consolidation of four existing lots into one parcel of 4.3 acres, a major use permit for a 130-room hotel, with a 200-seat restaurant and lounge area, meeting rooms, and a administrative and services area. • Lot size – 189,000 square feet • Floor area – 122,540 square feet • Parking: 229 spaces 1,300 ADT (650 trips in / 650 trips out) **Status:** EIR approved by the Encinitas City Council on January 22, 1992.	*Traffic* 1,300 ADT (650 trips in/650 trips out) *Biology* Impacts to Del Mar sand aster. Impacts mitigated through transplantation to a suitable location off-site.
2	CT 05-10 (Located northeast of project site; east of I-5 along Poinsettia Lane)	Poinsettia Single-family Residential	Subdivision of approximately 5 acres into 29 single-family residential lots; two open space lots; one driveway lot. **Status:** MND – Stamped May 2, 2006 NOD May 19, 2006	*Noise* Impacts from Interstate 5; Mitigation 18’ X 18’ private rear yard, 6’ high barrier. *Biology* No Impacts. Site previously graded with surrounding residential development. No sensitive plant species identified on site.
3	CUP 04-05 (Located northeast of project site; northeast corner of Aviara Parkway and Poinsettia Lane)	Calvary Chapel	26.94-acre site with a 13-acre church campus consisting of 49,000 square feet of a multi-purpose building and family center. Capacity is 1,800 persons. Project Buildings include:	*Biology* Preserves: • 7.58 acres of coastal sage scrub • 1.49 acres of southern maritime chaparral

Table 7-1 continued

Site Number	Reference/Project Number	NAME	Characteristics/Status	Impacts
			• 19,000 sq. ft. two-story preschool with 150 students • 4,000 sq ft chapel building • 7,000 sq ft gymnasium • 13,000 sq ft youth building • 6,000 sq ft adult education building • 1,049 parking spaces **Status:** MND dated September 20, 2005 NOD dated January 11, 2005	• 0.67 acres of southern willow scrub • 0.60 acres of wetland ruderal • Open Space - Northern portion of the site is native habitat (8.9 acres)
4	CT 02-14; CT 02-15; CT 03-03; CT 02-19 (Located northeast of project site; across I-5 and along Palomar Airport Road)	Bressi Ranch	Project site is approximately 585 acres. The project includes 15 planning areas and 6 open space areas. *Northern Area (150.3 acres):* (5) Industrial lots *Southern Area (434.8 acres):* (7) Residential Lots (1) Industrial Lot (1) Mixed Use Lot (1) Community Facility Lot (6) Open Space Lots **Status:** Master Plan EIR approved July 23, 2002	*Biology* Impacts 30.9 acres of Diegan coastal sage scrub Mitigation provided at 2:1 (61.8 acres of Diegan coastal sage scrub) Off-site Impacts •1.85 acres riparian scrub •0.48 acres riparian woodland •12.9 acres Diegan CSS •11.2 acres Floodplain scrub •12.9 acres southern maritime mixed chaparral •46.8 acres of non-native grassland •1.5 acres eucalyptus •11.3 acres of disturbed habitat

Table 7-1 continued

Site Number	Reference/Project Number	NAME	Characteristics/Status	Impacts
5	CT 01-09 (Located southeast of project site; near northeast corner of La Costa Drive and Rancho Santa Fe)	La Costa Town Square Project	Project site is approximately 81.4 acres with proposed mixed-use retail/commercial/office/residential development. Project includes 131 residential units; 80,000 sq. ft. industrial space; 380,000 sq. ft. commercial space. Approximately 5.7 acres will be protected as on-site open space. **Status:** EIR pending	*Traffic* 22,800 ADT *Biology* Project site is part of the Fieldstone Habitat Conservation Plan (HCP). Two small (0.003 acres total) pooling areas were identified. No gnatcatchers identified on-site. Impacts to sensitive species will occur. Habitat and wildlife areas are provided as part of compliance with Fieldstone HCP.

Table 7-2
Cumulative Impacts To Vegetation Communities/Habitats (acres) [1]

SITE NUMBER	Name	REFERENCE/ PROJECT NUMBER	Southern willow scrub		Southern coastal bluff scrub (including disturbed)		Diegan coastal sage scrub (including disturbed)		Eucalyptus woodland		Disturbed habitat		**Total**	
			Impacted	Mitigation	Impacted	Mitigation	Impacted	Mitigation	Impacted	Mitigation	Impacted	Mitigation	Impacted	Mitigation
Proposed Project	Ponto Beachfront Village Vision Plan	EIR 05-05/ GPA 05-04/ LCPA 05-01	0.04	0.12	0.1	0.3	1.2	2.4	0.3	[2]	21.1	[2]	22.7	2.81
1	City of Encinitas Hotel Project	99-001; 04-268; 93-172	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Poinsettia Single-family Residential	CT 05-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Calvary Chapel	CUP 04-05	Unk	0.67	0.0	0.0	Unk	7.58	0.0	0.0	0.0	0.0	Unk	8.25
4	Bressi Ranch	CT 02-14; CT 02-15; CT 03-03; CT 02-19	0.08	0.08	0.0	0.0	30.9	61.8	0.0	0.0	385.0	0.0	416.0	61.9
5	La Costa Town Square Project	CT 01-09	Part of the Fieldstone HCP – impacts and mitigation are unknown.											
Total			0.12	0.87	0.1	0.3	32.1	71.78	0.3	[2]	406.1	[2]	441.6	72.97

Unk = unknown
[1]Errors in addition due to rounding.
[2] Mitigated through payment of an in lieu mitigation fee in an amount to be determined by the City Council.

Table 7-3
Near Term (2010)
Peak Hour Intersection LOS – HCM

Intersections	Without Vision Plan				With Vision Plan				Change in Delay	
	AM		PM		AM		PM			
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	AM	PM
Palomar Airport Road / Avenida Encinas	31.6	C	45.4	D	31.7	C	47.0	D	0.1	1.5
Palomar Airport Road / I-5 SB Ramps	20.0	C	15.8	B	20.1	C	16.0	B	0.1	0.2
Palomar Airport Road / I-5 NB Ramps	39.4	D	32.6	C	39.9	D	33.4	C	0.5	0.8
Palomar Airport Road / Paseo Del Norte	34.5	C	40.9	D	34.6	C	41.0	D	0.1	0.1
Palomar Airport Road / Armada Drive	20.8	C	47.8	D	20.8	C	47.8	D	0.0	0.0
Palomar Airport Road / Hidden Valley Road	14.1	B	16.2	B	15.3	B	16.4	B	1.2	0.2
Palomar Airport Road / College Boulevard	35.7	D	41.1	D	35.8	D	42.0	D	0.1	0.9
Palomar Airport Road / Camino Vida Roble	30.1	C	35.0	D	30.1	C	35.0	C	0.0	0.0
Palomar Airport Road / El Camino Real	49.3	D	**77.3**	**E**	49.3	D	**78.4**	**E**	0.0	1.1
Palomar Airport Road / El Fuerte St.	**91.5**	**F**	30.3	C	**92.2**	**F**	30.4	C	0.7	0.1
Palomar Airport Road / Melrose Drive	55.0	D	50.6	D	55.2	E	50.9	D	0.2	0.3
Carlsbad Boulevard / Island Way	8.1	A	7.2	A	8.0	A	7.2	A	-0.1	0.0
Carlsbad Boulevard / Breakwater Road	12.6	B	6.2	A	12.7	B	6.2	A	0.1	0.0
Carlsbad Boulevard / Poinsettia Lane	28.3	C	32.3	C	34.9	C	54.6	D	6.6	22.3
Poinsettia Lane / Avenida Encinas	32.3	C	38.6	D	34.7	C	43.1	D	2.4	4.5
Poinsettia Lane / I-5 SB Ramps	25.9	C	28.0	C	30.8	C	46.0	D	4.9	18.0
Poinsettia Lane / I-5 NB Ramps	29.9	C	28.1	C	37.0	D	35.9	D	7.1	7.8
Poinsettia Lane / Paseo Del Norte	28.0	C	35.6	D	28.9	C	40.3	D	0.9	4.7
Paseo Del Norte / Camino del las Ondas	29.9	C	24.7	C	30.9	C	26.2	C	1.0	1.5
Poinsettia Lane / Batiquitos Drive	23.4	C	23.2	C	23.0	C	23.1	C	-0.4	-0.1
Poinsettia Lane / Aviara Parkway	30.2	C	33.2	C	30.1	C	33.9	C	-0.1	0.7
El Camino Real / Cassia Road	21.2	C	11.2	B	22.4	C	15.2	B	1.2	4.0
El Camino Real / Camino Vida Roble	23.0	C	40.9	D	23.0	C	41.1	D	0.0	0.2
Carlsbad Boulevard / Ponto Drive	6.3	A	16.4	B	20.1	C	30.8	C	13.8	14.4
Carlsbad Boulevard / Beach Way	-	-	-	-	11.6	B	14.6	B	10.0	14.6
Carlsbad Boulevard / Avenida Encinas	13.3	B	13.6	B	18.7	B	19.6	B	5.4	6.0
Ponto Drive / Avenida Encinas	29.3	C	31.7	C	34.0	C	36.2	D	4.7	4.5
La Costa Avenue / Carlsbad Boulevard	35.9	D	29.3	C	41.0	D	35.8	D	5.1	6.5
La Costa Avenue / Vulcan Avenue	**448.3**	**F**	**560.3**	**F**	**925.7**	**F**	**1271.4**	**F**	**477.4**	**711.1**
La Costa Avenue / I-5 SB Ramps	25.5	C	27.5	C	25.0	C	26.9	C	-0.5	-0.6
La Costa Avenue / I-5 NB Ramps	22.4	C	23.0	C	22.8	C	24.1	C	0.4	1.1
La Costa Avenue / Piraeus St.	11.6	B	11.1	B	11.6	B	11.0	B	0.0	-0.1
El Camino Real / La Costa Avenue	**61.3**	**E**	39.4	D	**61.5**	**E**	39.9	D	0.2	0.5
Carlsbad Boulevard / Leucadia Avenue	22.7	C	35.1	D	23.1	C	36.8	D	0.4	1.7

Italic - Unsignalized Intersection
Deficient intersections shown in bold.

Table 7-4
Near Term (2010)
Peak Hour Roadway Segment LOS

Location		Direction (# lanes)	Capacity	2010 No Vision Plan A.M.			2010 No Vision Plan P.M.			2010 With Vision Plan A.M.			2010 With Vision Plan P.M.			Change in V/C	
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	AM	PM
Carlsbad Blvd.	Palomar Airport Road to Island Way	NB (2)	3,600	414	0.12	A	1,064	0.30	A	438	0.12	A	1,091	0.30	A	0.00	0.00
		SB (2)	3,600	1,004	0.28	A	1,259	0.35	A	1,048	0.29	A	1,325	0.37	A	0.01	0.02
	Island Way to Breakwater Road	NB (2)	3,600	409	0.11	A	1,077	0.30	A	433	0.12	A	1,104	0.31	A	0.01	0.01
		SB (2)	3,600	984	0.27	A	1,207	0.34	A	1,028	0.29	A	1,273	0.35	A	0.02	0.01
	Breakwater Road to Poinsettia Lane	NB (2)	3,600	383	0.11	A	1,008	0.28	A	407	0.11	A	1,035	0.29	A	0.00	0.01
		SB (2)	3,600	933	0.26	A	1,040	0.29	A	977	0.27	A	1,106	0.31	A	0.01	0.02
	Poinsettia Lane to Ponto Drive	NB (2)	3,600	382	0.11	A	1,020	0.28	A	406	0.11	A	1,047	0.29	A	0.00	0.01
		SB (2)	3,600	951	0.26	A	1,042	0.29	A	995	0.28	A	1,108	0.31	A	0.02	0.02
	Ponto Drive to Beach Way	NB (2)	3,600	979	0.27	A	1,061	0.29	A	1,187	0.33	A	1,296	0.36	A	0.06	0.07
		SB (2)	3,600	1,109	0.31	A	1,275	0.35	A	1,333	0.37	A	1,611	0.45	A	0.06	0.10
	Beach Way to Avenida Encinas	NB (2)	3,600	769	0.21	A	873	0.24	A	850	0.23	A	990	0.28	A	0.02	0.04
		SB (2)	3,600	1,172	0.33	A	1,189	0.33	A	1,241	0.34	A	1,288	0.36	A	0.01	0.03
	Avenida Encinas to La Costa Avenue	NB (2)	3,600	1,003	0.28	A	1,057	0.29	A	1,223	0.34	A	1,387	0.39	A	0.06	0.10
		SB (2)	3,600	1,356	0.38	A	1,381	0.38	A	1,553	0.43	A	1,599	0.44	A	0.05	0.06
	La Costa Avenue to Leucadia Boulevard	NB (2)	3,600	461	0.13	A	1,203	0.33	A	521	0.14	A	1,294	0.36	A	0.01	0.03
		SB (2)	3,600	1,832	0.51	A	808	0.22	A	1,887	0.52	A	869	0.24	A	0.01	0.02

Table 7-4 continued

Location		Direction (# lanes)	Capacity	2010 No Vision Plan A.M.			2010 No Vision Plan P.M.			2010 With Vision Plan A.M.			2010 With Vision Plan P.M.			Change in V/C	
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	AM	PM
Avenida Encinas	Cannon Road to Palomar Airport Road	NB (2)	3,600	412	0.11	A	493	0.14	A	414	0.12	A	495	0.14	A	0.01	0.00
		SB (2)	3,600	253	0.07	A	649	0.18	A	255	0.07	A	653	0.18	A	0.00	0.00
	Palomar Airport Road to Poinsettia Lane	NB (1)	1,800	210	0.12	A	580	0.32	A	213	0.12	A	583	0.32	A	0.00	0.00
		SB (1)	1,800	442	0.24	A	367	0.20	A	445	0.24	A	372	0.20	A	0.00	0.00
	Poinsettia Lane to Windrose Circle	NB (2)	3,600	552	0.15	A	594	0.17	A	609	0.17	A	654	0.18	A	0.02	0.01
		SB 2)	3,600	392	0.11	A	615	0.17	A	450	0.13	A	702	0.20	A	0.02	0.03
	Windrose Circle to Carlsbad Boulevard	NB (1)	1,800	255	0.14	A	339	0.19	A	430	0.24	A	604	0.34	A	0.10	0.15
		SB (1)	1,800	294	0.16	A	297	0.17	A	457	0.25	A	468	0.26	A	0.09	0.09
College Boulevard	El Camino Real to Palomar Airport Road	NB (2)	3,600	1,339	0.37	A	591	0.16	A	1,353	0.38	A	606	0.17	A	0.01	0.01
		SB (2)	3,600	451	0.13	A	1,252	0.35	A	466	0.13	A	1,275	0.35	A	0.00	0.00
Aviara Parkway	Palomar Airport Road to Poinsettia Lane	NB (2)	3,600	980	0.27	A	450	0.13	A	980	0.27	A	450	0.13	A	0.00	0.00
		SB (2)	3,600	273	0.08	A	1,008	0.28	A	273	0.08	A	1,008	0.28	A	0.00	0.00
	Poinsettia Lane to Batiquitos Drive	NB (2)	3,600	709	0.20	A	583	0.16	A	714	0.20	A	591	0.16	A	0.00	0.00
		SB (2)	3,600	362	0.10	A	958	0.27	A	367	0.10	A	963	0.27	A	0.00	0.00
Paseo del Norte	Cannon Road to Palomar Airport Road	NB (2)	3,600	765	0.21	A	830	0.23	A	767	0.21	A	833	0.23	A	0.00	0.00
		SB (2)	3,600	346	0.10	A	849	0.24	A	349	0.10	A	853	0.24	A	0.00	0.00
	Camino Del Parque to Camino del Las Ondas	NB (1)	1,800	739	0.41	A	620	0.34	A	739	0.41	A	620	0.34	A	0.00	0.00
		SB (1)	1,800	330	0.18	A	1,027	0.57	A	330	0.18	A	1,027	0.57	A	0.00	0.00

Table 7-4 continued

Location		Direction (# lanes)	Capacity	2010 No Vision Plan A.M.			2010 No Vision Plan P.M.			2010 With Vision Plan A.M.			2010 With Vision Plan P.M.			Change in V/C	
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	AM	PM
Paseo del Norte	Camino del Las Ondas to Poinsettia Lane	NB (1)	1,800	90	0.05	A	34	0.02	A	90	0.05	A	34	0.02	A	0.00	0.00
		SB (1)	1,800	28	0.02	A	109	0.06	A	28	0.02	A	109	0.06	A	0.00	0.00
El Camino Real	Faraday Avenue to Palomar Airport Road	NB (3)	5,400	2,444	0.45	A	1,742	0.32	A	2,444	0.45	A	1,742	0.32	A	0.00	0.00
		SB (3)	5,400	1,600	0.30	A	2,221	0.41	A	1,600	0.30	A	2,221	0.41	A	0.00	0.00
	Palomar Airport Road to Camino Vida Roble	NB (3)	5,400	1,807	0.33	A	1,557	0.29	A	1,816	0.34	A	1,567	0.29	A	0.01	0.00
		SB (3)	5,400	1,329	0.25	A	1,820	0.34	A	1,339	0.25	A	1,834	0.34	A	0.00	0.00
	Camino Vida Roble to Cassia Road	NB (2)	3,600	2,145	0.60	A	1,142	0.32	A	2,154	0.60	A	1,152	0.32	A	0.00	0.00
		SB (3)	5,400	1,701	0.32	A	1,268	0.23	A	1,710	0.32	A	1,278	0.24	A	0.00	0.01
	Cassia Road to La Costa Avenue	NB (3)	5,400	2,377	0.44	A	2,251	0.42	A	2,377	0.44	A	2,251	0.42	A	0.00	0.00
		SB (2)	3,600	2,130	0.59	A	2,145	0.60	A	2,130	0.59	A	2,145	0.60	A	0.00	0.00
Palomar Airport Road	Avenida Encinas to I-5	EB (3)	5,400	598	0.11	A	1,081	0.20	A	609	0.11	A	1,093	0.20	A	0.00	0.00
		WB (3)	5,400	879	0.16	A	1,082	0.20	A	909	0.17	A	1,126	0.21	A	0.01	0.01
	I-5 to Paseo del Norte	EB (3)	5,400	2,658	0.49	A	2,037	0.38	A	2,660	0.49	A	2,041	0.38	A	0.00	0.00
		WB (3)	5,400	1,198	0.22	A	2,993	0.55	A	1,202	0.22	A	2,998	0.56	A	0.00	0.01
Palomar Airport Road	Paseo del Norte to Armada Drive	EB (3)	5,400	2,629	0.49	A	1,613	0.30	A	2,629	0.49	A	1,614	0.30	A	0.00	0.00
		WB (3)	5,400	1,179	0.22	A	2,957	0.55	A	1,180	0.22	A	2,958	0.55	A	0.00	0.00
	Armada Drive to Hidden Valley Road	EB (3)	5,400	2,458	0.46	A	1,923	0.36	A	2,458	0.46	A	1,924	0.36	A	0.00	0.00
		WB (3)	5,400	1,557	0.29	A	2,588	0.48	A	1,558	0.29	A	2,589	0.48	A	0.00	0.00

Table 7-4 continued

Location		Direction (# lanes)	Capacity	2010 No Vision Plan A.M.			2010 No Vision Plan P.M.			2010 With Vision Plan A.M.			2010 With Vision Plan P.M.			Change in V/C	
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	AM	PM
Palomar Airport Road	Hidden Valley Road to College Boulevard	EB (3)	5,400	2,364	0.44	A	1,799	0.33	A	2,382	0.44	A	1,820	0.34	A	0.00	0.01
		WB (3)	5,400	1,565	0.29	A	2,467	0.46	A	1,586	0.29	A	2,498	0.46	A	0.00	0.00
	College Boulevard to Camino Vida Roble	EB (3)	5,400	1,703	0.32	A	1,361	0.25	A	1,703	0.32	A	1,362	0.25	A	0.00	0.00
		WB (3)	5,400	1,136	0.21	A	1,585	0.29	A	1,137	0.21	A	1,586	0.29	A	0.00	0.00
	Camino Vida Roble to El Camino Real	EB (3)	5,400	1,273	0.24	A	1,360	0.25	A	1,273	0.24	A	1,361	0.25	A	0.00	0.00
		WB (3)	5,400	1,354	0.25	A	1,140	0.21	A	1,355	0.25	A	1,141	0.21	A	0.00	0.00
	El Camino Real to El Fuerte Street	EB (3)	5,400	1,818	0.34	A	2,874	0.53	A	1,827	0.34	A	2,884	0.53	A	0.00	0.00
		WB (3)	5,400	3,115	0.58	A	1,751	0.32	A	3,125	0.58	A	1,766	0.33	A	0.00	0.01
	El Fuerte Street to Melrose Drive	EB (3)	5,400	1,368	0.25	A	3,095	0.57	A	1,377	0.26	A	3,105	0.58	A	0.01	0.01
		WB (3)	5,400	3,146	0.58	A	1,691	0.31	A	3,156	0.58	A	1,706	0.32	A	0.00	0.01
Poinsettia Lane	Carlsbad Boulevard to Avenida Encinas	EB (2)	3,600	196	0.05	A	420	0.12	A	380	0.11	A	627	0.17	A	0.06	0.05
		WB (2)	3,600	339	0.09	A	483	0.13	A	519	0.14	A	752	0.21	A	0.05	0.08
	Avenida Encinas to I-5	EB (2)	3,600	660	0.18	A	1,006	0.28	A	894	0.25	A	1,265	0.35	A	0.07	0.07
		WB (2)	3,600	770	0.21	A	943	0.26	A	1,001	0.28	A	1,289	0.36	A	0.07	0.10
	I-5 to Paseo del Norte	EB (2)	3,600	1,334	0.37	A	1,603	0.45	A	1,402	0.39	A	1,679	0.47	A	0.02	0.02
		WB (2)	3,600	1,254	0.35	A	1,480	0.41	A	1,329	0.37	A	1,592	0.44	A	0.02	0.03
	Paseo Del Norte to Batiquitos Drive	EB (2)	3,600	965	0.27	A	1,147	0.32	A	1,015	0.28	A	1,203	0.33	A	0.01	0.02
		WB (2)	3,600	951	0.26	A	1,093	0.30	A	1,006	0.28	A	1,175	0.33	A	0.02	0.03

Table 7-4 continued

Location		Direction (# lanes)	Capacity	2010 No Vision Plan A.M.			2010 No Vision Plan P.M.			2010 With Vision Plan A.M.			2010 With Vision Plan P.M.			Change in V/C	
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	AM	PM
Poinsettia Lane	Batiquitos Drive to Aviara Parkway	EB (2)	3,600	1,065	0.30	A	855	0.24	A	1,116	0.31	A	911	0.25	A	0.01	0.01
		WB (2)	3,600	651	0.18	A	1,311	0.36	A	706	0.20	A	1,394	0.39	A	0.02	0.03
	Aviara Parkway to El Camino Real	EB (2)	3,600	429	0.12	A	427	0.12	A	475	0.13	A	478	0.13	A	0.01	0.01
		WB (2)	3,600	375	0.10	A	700	0.19	A	425	0.12	A	775	0.22	A	0.02	0.03
La Costa Ave.	Carlsbad Boulevard to Vulcan Avenue	EB (1)	1,800	551	0.31	A	737	0.41	A	692	0.38	A	893	0.50	A	0.07	0.01
		WB (1)	1,800	655	0.36	A	632	0.35	A	815	0.45	A	872	0.48	A	0.08	0.14
	Vulcan Avenue to I-5	EB (1)	1,800	715	0.40	A	809	0.45	A	856	0.48	A	965	0.54	A	0.08	0.09
		WB (1)	1,800	887	0.49	A	1,327	0.74	C	1,047	0.58	A	1,567	0.87	D	0.09	0.13
	I-5 to Piraeus Street	EB (2)	3,600	1,583	0.44	A	1,562	0.43	A	1,620	0.45	A	1,603	0.45	A	0.01	0.02
		WB (2)	3,600	1,465	0.41	A	1,518	0.42	A	1,505	0.42	A	1,578	0.44	A	0.01	0.02
	Piraeus Street to El Camino Real	EB (2)	3,600	1,578	0.44	A	1,455	0.40	A	1,615	0.45	A	1,496	0.42	A	0.01	0.02
		WB (2)	3,600	1,337	0.37	A	1,136	0.32	A	1,377	0.38	A	1,196	0.33	A	0.01	0.01
	East of El Camino Real	EB (2)	3,600	542	0.15	A	981	0.27	A	579	0.16	A	1,022	0.28	A	0.01	0.01
		WB (2)	3,600	923	0.26	A	722	0.20	A	963	0.27	A	782	0.22	A	0.01	0.02
Ponto Drive	Carlsbad Boulevard to Avenida Encinas	NB (1)	1,800	102	0.06	A	150	0.08	A	243	0.13	A	307	0.17	A	0.11	0.09
		SB (1)	1,800	9	0.00	A	221	0.12	A	152	0.08	A	435	0.24	A	0.08	0.12

Figure 7-1
Cumulative Projects Map

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Figure 7-2
Near-Term (2010) ADT Volumes

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Figure 7-3
Near-Term (2010) with Vision Plan ADT Volumes

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Figure 7-4
Near-Term (2010) AM Level of Service

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Figure 7-5
Near-Term (2010) PM Level of Service

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Figure 7-6
Near-Term (2010) with Vision Plan – AM Level of Service

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Figure 7-7
Near-Term (2010) with Vision Plan - PM Level of Service

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